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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DENTZ, BERNARD I

ART UNIT

PAPER NUMBER

1625

MAIL DATE

DELIVERY MODE

12/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/542,176

Applicant(s)

HONG ET AL.

Examiner

Bernard Dentz

Art Unit

1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) all are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-498)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

Continuation of Disposition of Claims: Claims pending in the application are 6-8, 11, 18, 21-23, 28-32, 34, 35, 38, 40, 54, 55, 60, 66, 72-74, 79, 80, 90-99, 105, 106, 111, 117, 122, 123, 129, 130 and 137.

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 6 and 7 drawn to intermediates which are allyloxy-alkanoic acid esters

Group II., claim(s) 8,11,18,21 and 22 drawn to a method for making dihydropyran carboxylic acids and said dihydropyran-carboxylic acids.

Group III, claims 23,28 and 32(s), drawn to a process involving acylation in the presence of a resolving enzyme.

Group IV, claim(s) 34,35 and 38 drawn to a dihydroxylation process.

Group V, claim(s) 39 and 40, drawn to tetrahydro-4,5-dihydroxypyran-2-carboxylic acid esters where the 3-position has an oxy substituent

Group VI, claim(s) 54, drawn to tetrahydro- 3,4,5-trioxy-pyran-2-carboxylic acid esters.

Group VII, claim(s) 59 and 60, drawn to dioxabicyclo[3.2.1]octan-7-ones.

Group VIII, claim(s) 66, drawn to tetrahydro-2-acyl- (where acyl is used in a broad sense) -4-hydroxy-3,5-dioxy-pyrans.

Group IX, claim(s) 72 and 73, drawn to 3-oxy-2,5-dihydro-pyran-2-methanols

Group X, claim(s) 74, drawn to ester and ether derivatives of the directly above.

Group XI, claim(s) 79 and 80, drawn to epoxide containing compounds.

Group XII, claim(s) 90, drawn to carbonates of -3,4-dioxy-tetrahydropyran-2-methanol.

Claims 91-98 are not included in the restriction requirement because they are not within the scope of claim 90 from which they depend. See R13. Thus they are withheld from consideration.

Group XIII, claim(s) 105 and 106, drawn to tetrahydropyranodioxines

Group XIV, claim(s) 111, drawn to epoxide derivatives of the above.

Group XV, claim(s) 117 drawn to alkoxy derivatives of tetrahydropyranodioxins.

Group XVI, claim(s) 122 and 123, drawn to certain dialkoxy derivatives of tetrahydropyranodioxins

Group XVII, claims 129 and 130, drawn to certain derivatives of 4-allyloxy-3,5-dihydroxy-1-pentene

Group XVIII, claims 136 and 137, drawn to certain dioxane derivatives.

The inventions listed as Groups I-XVIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons. Some of the material is novel See the European Search Report of record.

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

Applicant is required to elect a single disclosed species within the elected Group.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The following claim(s) are generic: All of the claims except 73 and 80.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Dentz whose telephone number is 571-272-0683. The examiner can normally be reached on Mon-Fri from 8 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres, can be reached on 571 272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dentz

12-5-2007



BERNARD DENTZ
PRIMARY EXAMINER